REMARKS

In the Official Action mailed on **12 January 2006**, the Examiner reviewed claims 1-21. Claims 1-21 were rejected under 35 U.S.C. 102(b) as being anticipated by Chopra et al. (USPN 6,412,043 hereinafter "Chopra").

Amendments to the specification

The section title on page 9, line 24, and paragraphs [0050] and [0054] have been amended to correct typographical errors.

The section title on page 11, line 8 has been amended to correct formatting errors.

No new matter has been added.

Rejections under 35 U.S.C. §102(b)

Independent claims 1, 11, and 21 were rejected as being anticipated by Chopra. Applicant respectfully points out that Chopra teaches methods for using improved memory management units (MMUs), translation lookaside buffers (TLBs), and caches (see Chopra, col. 1, lines 7-11, and see Chopra, col. 1, lines 63-65).

In contrast, the present invention teaches a method for supporting read-only objects within an object addressed memory hierarchy by interposing a translator and an object table between the L2 cache and the main memory of a conventional memory hierarchy (see FIG. 1, see page 1, paragraph [0001], lines 23-25, and see page 7, paragraph [0029], lines 7-8 of the instant application).

Supporting read-only objects is advantageous because it allows read-only copies of an object to reside on multiple hosts (see page 2, paragraph [0003], lines 11-12 of the instant application). This provides significant performance advantages because it enables each host to access a read-only copy of the object in

its local cache (see page 2, paragraph [0003], lines 13-14 of the instant application).

Examiner appears to equate translator 108 to a TLB. Applicant respectfully points out that translator 108 is included in computer system 100 in addition to TLB 114 and TLB 115 (see FIG. 1 of the instant application). Translator 108 translates between object identifiers and corresponding object addresses (see page 6, paragraph [0025], lines 13-15, and see page 7, paragraph [0029], lines 8-10 of the instant application). Chopra does not support such object identifier to object address translation.

Furthermore, during a load operation involving an object, the present invention bypasses the TLB, which differs from a conventional load operation which uses a TLB (see page 6, paragraphs [0024]-[0025] of the instant application).

Moreover, translator 108 converts an object address into a physical address (see page 7, paragraph [0029] of the instant application). This is in contrast to a TLB, which converts a virtual address into a physical address for non-object references (see page 6, paragraph [0023] of the instant application).

There is nothing within Chopra that suggests a translator for translating an object address into a physical address. Furthermore, there is nothing within Chopra that teaches supporting read-only objects.

Accordingly, Applicant has amended independent claims 1, 11, and 21 to clarify that the request to access an object is received at the translator. These amendments find support in paragraph [0029] of the instant application. Dependent claims 6, 10, 16, and 20 have been amended to correct antecedent basis. Dependent claims 5, and 15 have been cancelled without prejudice.

Hence, Applicant respectfully submits that independent claims 1, 11, and 21 as presently amended are in condition for allowance. Applicant also submits that claims 2-4, and 6-10, which depend upon claim 1, and claims 12-14, and 16-

20, which depend upon claim 11, are for the same reasons in condition for allowance and for reasons of the unique combinations recited in such claims.

CONCLUSION

It is submitted that the present application is presently in form for allowance. Such action is respectfully requested.

Respectfully submitted,

By   _[signature]_

Edward J. Grundler
Registration No. 47,615

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Edward J. Grundler
PARK, VAUGHAN & FLEMING LLP
2820 Fifth Street
Davis, CA 95616-7759
Tel: (530) 759-1663
FAX: (530) 759-1665
Email: edward@parklegal.com